REMARKS/ARGUMENTS

These remarks are submitted in response to the Office Action dated February 23, 2006 (Office Action). As this response is timely filed before the expiration of the 3-month shortened statutory period, no fee is believed due.

Claims 1-4, 31, and 37-40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar et al. in views of Ibe et al. (US 2004/0087307), and Fors et al. Claims 6 and 42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar et al. in views of Ibe et al., Fors et al., and Chaskar et al., and further in view of Pan et al. (US 2004/0192294 A1). Claims 7-9, 11, 12, 32, 43-45, 47, and 48 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Sundar et al. in view of Ibe et al., and Lowdon (US 6,073,019). Claims 24, 29, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar in view of Khartabil et al (US 2004/0249891 A1). Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar et al. in view of Khartabil et al., and further in view of Ibe et al. Claim 26 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar et al. in views of Khartabil et al., Ibe et al. and, further in view of Chaskar et al (US 2004/0090937). Claims 27-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar et al. in views of Khartabil et al., Ibe et al., Chaskar et al., Fors et al., and Roach Jr. (US Pat. No. 5,845,211) . Claims 15-18, 34, and 51-54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar in view of Chaskar et al. Claims 19 and 55 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundar et al. in view of Chaskar et al., and further in view of Pan et al.

Applicants wish to thank the Examiner for her thorough examination. Applicants also wish to thank the Examiner for acknowledging at page 2 of the Office Action that the declarations and evidence filed in the previous response dated December 12, 2005, overcome the earlier-cited references, U.S. Published Patent Application No.

2005/0059400 to Jagadeesan, *et al.*, U.S. Published Patent Application No. 2004/0159153 to Mousseau, *et al.*, and U.S. Published Patent Application No. 2005/0070288 to Belkin, *et al.*

Applicants have amended each of the independent claims, Claims 1, 7, 13, 15, 20, 22, 24, 31-37, 43, 49, 51, 56, and 58 to further emphasize certain aspects of Applicants' invention. Applicants also have amended dependent Claim 47 to overcome the claim objection stated at page 2 of the Office Action. The claim amendments are fully supported throughout the Specification, as discussed herein. (See, e.g., Specification, paragraph 0007, at p. 4; paragraphs 0033-0035, at pp. 11-12; and paragraphs 0041-0042, at pp. 13-14.) No new matter is introduced by the claim amendments.

Applicants Invention

It may be useful to reiterate certain aspects of Applicants' invention prior to addressing the cited references. One embodiment of the invention, typified by independent Claim 1, as amended, is a method of roaming between a cellular network and a wireless network. The method can include receiving an invitation over the wireless network, the invitation being sent from a mobile communications device engaged in a cellular call over a cellular voice channel. The method further can include authenticating the mobile communications device over the wireless network, and sending an acknowledgement of the invitation to the mobile communications device over the wireless network. Additionally, the method can include comparing the strength of signals detected from both the cellular network and wireless network.

The method further can include initiating a handoff based on the comparison of detected signal strengths. Through the handoff, the established cellular call is switched from the cellular network to the wireless network. More particularly, initiation of the handoff can be effected by causing the mobile communications device to attenuate a

signal transmitted from the mobile communications device to the cellular network, thereby, in turn, causing the cellular network to effect the handoff. (See, e.g., Specification, paragraph 0007, at p. 4, and paragraphs 0041-0043, at pp. 13-14.)

Other embodiments include systems for roaming between a cellular network and a wireless network. Systems, according to these various embodiments, include a mobile communications device which includes therein means for attenuating a signal transmitted from the mobile communication device to one network so as to initiate the handoff of a call from the one network to another. (See, e.g., Specification, paragraphs 0033-0035, at pp. 11-12.)

The Claims Define Over The Prior Art

As already noted, each of the claims were rejected under various ones or combinations of the several references cited. Applicants respectfully assert, however, that none of the cited references, alone or in combination, teach or suggest every feature recited in independent Claims 1, 7, 13, 15, 20, 22, 24, 31-37, 43, 49, 51, 56, and 58, as amended.

For example, none of the references teaches or suggests initiating handoffs between cellular and wireless networks by causing a mobile communications device to attenuate a signal transmitted by the mobile communications device to one of the networks so as cause the handoff of a call carried over the one network to the other, as recited in each of the independent claims as amended. It is acknowledged in the Office Action, at least implicitly, that only one of the references – the newly-cited Lowdon reference – addresses such attenuation of signals.

Lowdon is directed to an apparatus for use in an underground railway system to effect the handover of radio telephone calls. (Abstract, lines 1-3.) As described in the abstract, Lowdon's apparatus includes an attenuator "such that [a] mobile radio effects call

handover" from one cable to another which both run parallel to a track over which an underground train travels. (Abstract, lines 10-14.) Notwithstanding this generalized reference to an attenuator, there are stark differences between Lowdon's apparatus and Applicants' invention, as are revealed by a closer examination of the detailed description of Lowdon.

Firstly, Lowdon's attenuator does *not* actually effect a handover by attenuating a signal emanating from a mobile communication device. With Lowdon, the mobile communication device is one or more mobile devices carried on a moving train and communicating with base stations positioned at intervals along the underground railway tracks. (See col. 2, lines 28-42.) Call handovers are effected by the movement of the train itself, as it moves away from one base station and toward another. Secondly, and more fundamentally, the attenuator does *not* attenuate signals transmitted by any mobile device, but rather it attenuates "the strength of [a] radio field radiated from [a] cable" adjacent to the track.

The signal that is attenuated by Lowdon, therefore, is not a signal transmitted *from* a mobile communication device; it is an "electric field" sensed *by* a moving train. As a consequence of the movement of the train away from an end of the cable parallel to the railway track, the "magnitude of the signal detected by the mobile radio" is attenuated (See col. 2, lines 12-16.) Lowdon's attenuator causes the magnitude of the electric field to drop more sharply than it otherwise would so as to "ensure no interruption in a call during handover;" that is, by causing the mobile radio to establish contact with the base station toward which the train is moving earlier than it otherwise would. The intent and effect of the attenuator are both explicitly described in Lowdon:

> "A train travelling along the railway track 8 is equipped with a mobile radio and has, on the front of the train, an antenna which detects the radio field

set up by the nearby cable 7 or 12. As the train proceeds from the railway station 1 to the railway station 9, the strength of the first radio field radiated from the cable 7 (and consequently the magnitude of the signal detected by the mobile radio) will gradually decrease as indicated at 20 in FIG. 9. When the front end of the train passes the attenuator 16, the signal strength will drop sharply as indicated at 22. This sharp drop in the radio signal from the cable 7 is chosen to pass through the roaming threshold T1; i.e., the magnitude of received signal strength below which the mobile radio commences its routine to initiate call handover to another base station. As the train proceeds towards the next railway station 2, the strength of signal received from the first cable continues to decrease, passing eventually through the usable signal threshold T2 below which the signal is likely to be to weak to be usable.

"Once the train has passed the position corresponding to the attenuator 16, the received signal strength 23 of the second radio field from the cable 12 will be sufficiently strong, ie its magnitude will be in excess of the roaming threshold T1 as indicated at 24. Hence, the mobile radio on the train will establish contact with the second radio field well before the signal strength of the first radio field passes below the usable signal threshold T2. This ensures that the mobile radio effects call handover onto the second radiating cable 12 before leaving the transition area defined by the overlapping lengths of cables 7 and 12. This overlapping length is chosen to ensure that handover occurs within the overlapping length at the maximum speed of the train." (Col. 2, lines 9-40.)

Lowdon's initiation is that of causing a radio telephone on a moving train to establish contact with a base station earlier than it otherwise would by attenuating an electric field sensed by the moving train. But this has nothing to do with initiating a call handover between cellular and wireless networks in response to a mobile communication device attenuating transmitted signals, as recited in each of the amended independent claims. Indeed, in one sense at least, Lowdon must be seen as a teaching away from Applicants' invention because Lowdon requires a mobile device that senses an electric field and an attenuation of the electric field sensed by the mobile device to initiate a handover. This is the opposite of a mobile device that initiates a call handover by attenuating a signal transmitted from, rather than sensed by, the mobile device.

Moreover, with respect to each of the independent claims directed to systems, Lowdon teaches the opposite of a mobile communication device having a mechanism, or means, for initiating a call handover by attenuating a signal transmitted by the mobile communication device. Lowdon's attenuator is not part of the mobile device; it is separate from and external to the mobile device. Moreover, as already pointed out, Lowdon's attenuator in no way affects signals transmitted by a mobile communication device. Lowdon's attenuator serves to attenuate an electric field sensed by a mobile communication device, not attenuate a signal transmitted by a mobile communication device to effectuate a call handover.

Accordingly, even when combined, none of the references teach or suggest every feature recited in each of the independent claims, as amended. Applicants therefore respectfully submit that amended independent Claims 1, 7, 13, 15, 20, 22, 24, 31-37, 43, 49, 51, 56, and 58 each define over the prior art. Applicants further respectfully submit that, whereas each of the remaining dependent claims depends from one of the amended independent claims while recited additional features, these claims likewise define over the prior art.

CONCLUSION

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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